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port developed by:	· / /- · · ·	tm Inc.	ARCS	
DECISION:				
1 1. Further Rem	edlai Site Assessment ur	ider CERCLA (Su	perfund) is <u>not</u> required because:	
site	does not qualify for fur assessment under CERG E Evaluation Accomplish	CLA	1 1b. Site may qualify for further action, but is deferred to:	RCRA NRC
1 2. Further Asse	ssment Needed Under C	ERCLA:	2a. (optional) Priority: Higher	Lower
2b. Activity. Type:	PA SI	ESI HAS ev	valuation	
	Other:			
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id Approved by: <u>[]</u> te Decision				

Final Preliminary Assessment Report Batchelor Oil Gardner, Massachusetts

CERCLIS No. MAD985297787 TDD No. 9202-12-AWP Work Assignment No. 10-1JZZ Work Order No. 04100-010-006-0005

INTRODUCTION

The Roy F. Weston, Inc. Alternative Remedial Contracts Strategy (WESTON/ARCS) team was requested by the Region I U.S. Environmental Protection Agency (EPA) Waste Management Division to perform a Preliminary Assessment (PA) of the Batchelor Oil site in Gardner, Massachusetts. Tasks were conducted in accordance with the ARCS contract, the PA Scope-of-Work, and Technical Specification provided by the EPA under Work Assignment No. 10-1JZZ which was issued to WESTON/ARCS on August 27, 1991. This PA was conducted as part of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) program, more commonly known as Superfund.

This PA complies with the requirements set forth under the Comprehensive Environmental Response. Compensation and Liability Act of 1980 (CERCLA) program, more commonly known as Superfund. It does not necessarily fulfill the requirements of other EPA regulations such as those under the Resource Conservation and Recovery Act (RCRA) or other Federal, State or local regulations. This package follows the guidelines developed under Superfund. The PA is a limited effort and is not intended to supersede more detailed investigations.

Background information used in the generation of this report was obtained through file searches at the Massachusetts Department of Environmental Protection (MA DEP) and EPA, telephone interviews with town officials and individuals knowledgeable of the property history and characteristics, and conversations with other Federal, State, and local agencies. Information was also collected during the WESTON/ARCS on-site reconnaissance on May 3, 1993.

SITE LOCATION AND DESCRIPTION

The site is located on the south side of West Broadway (766 West Broadway), approximately one mile west of the Route 2 overpass, in Gardner, Massachusetts (Figure 1). The corresponding latitude and longitude are 42°33′49.5″N, 72°0′52.0″W. The site corresponds with the Town of Gardner Assessor's Office tax map J-18, parcel 62-1 [1]. The site is abutted to the east by a residence and the Heritage Truck and Transit Company and the L&T Transit Company. Aspen Transportation Service and a redemption center/junkyard are located across West Broadway to the north (Figure 2). Rick's Radiator Repair abuts the site to the west. A drive-in theater and former clay pit occupies land south of the site property (Figure 2) [1, 10, 11].

The site is approximately one and one half acres in area, in a roughly rectangular-shaped lot (Figure 2). The lot is relatively flat, with no obvious topographic changes across most of the site. There are no permanent surface water bodies on the site. The southern section of the site is overgrown with brush and small trees. No areas of stained soil or stressed vegetation were observed in the overgrown area during the on-site reconnaissance (OSR). Most of the remainder of the lot nearest to West Broadway is without vegetation, and is covered with a dirt/gravel driveway area, parking area, and buildings [1].



ASPEN OIL DISTRIBUTION JUNKYARD/REDEMPTION TRANSPORTATION TANKS SERVICE CENTER WEST BROADWAY SEPTIC LEACH -HOUSE WITH OFFICE. STORAGE TRAILERS: MAINTENANCE FLOOR DRAINS-GARAGE DIRT BATCHELOR DRIVEWAY RESIDENCE CONCRETE WAREHOUSE FORMER LOCATION -OF 6 ABOVE GROUND STORAGE TANKS HERITAGE TRANSIT COMPANY POND (FORMER CLAY PIT) LEGEND PROPERTY BOUNDARY MASSACHUSETTS TREES GRASS LOCATION NOT TO SCALE SITE SKETCH BATCHELOR OIL GARDNER, MASSACHUSETTS FIGURE 2

The buildings on-site consist of an office structure with an attached vehicle maintenance garage, and a concrete warehouse. The office structure was once a house, and is located in the north central area of the site, adjacent to West Broadway. The office structure is rundown, with uneven walls and floors, and disintegrating plaster and paint. A room on the second floor is the only area used as an office. The office structure is heated with electric heaters. No evidence of hazardous material usage or disposal was noticed in the office structure [1].

The attached maintenance garage has three bays, and is constructed of cinder blocks and concrete. According to the site owner Mr. Charles Manca, the bays are used as a truck maintenance area for the C&M Express Co., which is owned by Mr. Manca. The maintenance garage is heated by oil, which is stored in two 250-gallon above-ground tanks against the inside west wall of the garage. The tanks appeared in good shape, with no evidence of substantial spills. The maintenance garages appeared clean and well-kept, with no staining observed on the concrete floor. Waste oil from vehicle maintenance is collected in a 55 gallon drum. The drum was partially full during the site reconnaissance, and appeared in good condition. No evidence of a release associated with this waste oil drum was observed. According to Mr. Manca, the waste oil is picked up on an as-needed basis by Cyn Oil Inc [1]. Mr. Manca had hazardous waste manifests on file dating back to 1977 which were observed by WESTON.

Two floor drains were observed in the floor of the maintenance garage. The discharge point of the floor drains were not known by Mr. Manca. No outfalls for the drains were observed during the OSR. The area of concrete floor around the drains was clean and free of staining [1].

The concrete warehouse is located near the center of the site. The rectangular shape building is approximately 1,500 square feet in area. The warehouse has an elevated loading dock on the north side. The interior of the warehouse has one room with a concrete floor, which appeared clean and intact. Mr Manca currently leases the warehouse as storage space. During the OSR, the warehouse contained a 100 square foot (approximate) pile of airplane engines and parts which belong to a current leasee. The floor had some areas of circular rust staining in the western end of the building. According to Mr. Manca, the rust staining may have come from metal drums stored in the building during a previous ownership. Mr. Manca had no knowledge of historical releases. (The ownership and usage history of the warehouse will be discussed in a later section). No evidence of a release of hazardous material associated with the warehouse was observed during the OSR [1].

The western two-thirds of the site was primarily a dirt/gravel surface for tractor trailer access and parking. Strips of grass existed only immediately adjacent to the office structure and along the northeastern site border. No extensive areas of pavement were observed [1]. No evidence of stained soil or stressed vegetation was observed in the parking/driveway area. Six tractor trailers were parked on the west side of the lot. The trailers are used by C&M Express.

No evidence of underground storage tanks was noticed during the OSR. Mr. Manca had no knowledge of past or present underground storage tanks at the property. Mr. Manca indicated that the site previously contained six aboveground tanks, just northwest of the concrete warehouse. Five of the tanks (2 - 15,000 gallons and 3 - 10,000 gallons) contained No. 2 fuel oil. The sixth tank was an 8,000 gallon gasoline tank. The tanks were removed from the

property in the late 1970s shortly after Mr. Manca purchased the property [19, 20]. No areas of soil staining or stressed vegetation was observed in the former tank area [1].

The site is not serviced by municipal water or sewer. The water supply for the property is a local, town-installed community well, approximately one-third of a mile south of the site. The well was installed greater than 25 years ago, by the Town of Gardner, as an experimental supply well, and has since been hooked up to the site and two adjacent lots to the east. The Town of Gardner does not maintain or monitor the well. Information on well depth was not available at the time of this study. Mr. Manca was not aware of any chemical testing of the wells. A septic system for the site is located off the west edge of the office structure (Figure 2). On-site toilets and sinks currently discharge into the system. Mr. Manca did not believe that the garage floor drain led into the system [1].

No preferred drainage pathways or ditches were observed on the site. The site did not contain fences, gates or other access controls at the time of the OSR. Mr. Manca indicated that people often trespass through the rear of the site in the vicinity of the drive-in theater [1].

Two potential source areas were observed during the OSR. One source area consists of the floor drains in the maintenance garage. The other is the former above-ground storage tank area.

SITE ACTIVITY/HISTORY

The site was used in the 1900s as a brickyard. Clay was mixed for making bricks towards the rear property line, near the existing pond on the abutting lot. Subsequent to brick-making, the lot was used by a variety of oil distribution/trucking companies run by Mr. Clarence Batchelor. According to Mr. Manca, Clarence Batchelor owned the property for approximately 20 years, during which time he operated a number of oil distribution/trucking companies under the Batchelder and Batchelor name variations. Records in the Town of Gardner Assessor's office show a variety of Batchelder companies from 1954 to 1967. According to Mr. Manca, the Batchelor Oil Company was an oil distribution/trucking company, which used the previous aboveground tanks and concrete warehouse to store virgin oil products prior to distribution. Mr. Manca indicated that the warehouse was used to store tanks of hydraulic oil for distribution by Batchelor Oil [1, 19, 20]. Additional trucking companies operated on the site from 1967 to 1977. Mr. Manca purchased the site from Marble Transportation Inc. in 1977, and started the C&M Express Co. C&M Express Co. has three employees, two of which operate tractor trailers and perform maintenance on the vehicles. C&M Express Co. has EPA hazardous waste I.D. Number MAD981892631.

The area in proximity to the site has also been used by a variety of trucking, auto repair and oil distribution companies. The lot abutting the site to the east is the Heritage Truck and Transit Company, which operates and maintains school buses. The lot abutting the site to the west, currently Rick's Radiator Repair, was formerly The Gardner Creamery. The redemption center/junkyard located across West Broadway was formerly Ferdette's Junkyard during the 1960s. The property to the east of the former Ferdette's Junkyard lot is an oil distribution facility, formerly known as Skin's Oil Company, but has since changed owners several times [1]. Mr. Manca recalled that the site has had at least three or four oil spill events since he's

been there, including one a couple of months ago. The recent spill event resulted in deployment of booms into the nearby Otter River [1].

A number of local businesses have been involved in the Environmental Protection Agency (EPA) site discovery process as a result of contamination in the nearby Otter and Miller Rivers. According to a site discovery report by NUS Corporation, PCB contamination was detected in Miller and Otter River Sediments downgradient of the area of Gardner, local to the Batchelor Oil facility. The discovery of PCB contamination resulted in the EPA Preliminary Assessments now underway in Gardner, Massachusetts [13]. MA DEP and EPA file information did not include any records of spills at the facility. According to records at the MA DEP and the EPA, no Notices of Non-Compliance or Notices of Violations were given to the facility or previous companies that occupied the site.

ENVIRONMENTAL SETTING

The Town of Gardner lies in a rural section of north-central Massachusetts. Abutting towns include Ashburnham (northeast), Templeton (west), Winchendon (north), Westminster (east) and Hubbardston (south) [10, 11]. The area has been the locale for a number of small manufacturing and industrial businesses since the late 1800s. Gardner was widely known as a furniture manufacturing center.

The Batchelor Oil site is located in the Otter River watershed, approximately one-tenth of a mile west of the river [10, 11]. A number of small ponds, rivers, and marshy areas are in close proximity to the Batchelor Oil site. Depth to groundwater on the site is most likely ten-feet or less, due to the presence of near-surface clay deposits and frequent flooding of the basement on the site. The groundwater flow direction is likely eastward, towards the Otter River. The local topography is relatively flat, with isolated hills outside of the town centers. The overburden geology of the site consists of thick clay deposits, as evident in the former usage of the site as a brick pit. The local bedrock geology is mapped as the Paxton formation, a Silurian-aged assemblage of sulfitic mica schists and calc-silicate granofels. There are no major faults mapped in close proximity to the site [16].

The residents of Gardner and surrounding towns obtain drinking water from private wells, municipal wells, community wells, and municipal surface water supplies. The Gardner municipal supply is a surface water intake on the south shore of Crystal Lake, approximately one and three-quarter miles northeast of the site (Figure 1). The Town of Templeton also has municipal supply sources within four miles of the site. The Town of Templeton has a blended municipal system, which is composed of four overburden wells which contribute to a common holding tank [6]. The Otter River well and Sawyer Street well are within a four mile radius of the Batchelor Oil property (Figure 3). The Birch Hill #1 and #2 wells are outside the four mile radius of the site. A summary of municipal water supplies within four miles of the site are presented in Table 1 [3, 4, 5, 6].

Table 2 presents the estimated population served by public and private wells within four miles of the site, as calculated into radial distance rings from the site.

Table 1

Municipal Groundwater Supply Sources
Within Four Miles of Batchelor Oil Property

No.	Source Name	Distance/Direction Batchelor Oil Property	Location of Source	Approximate Population Served	Source Type
1	Otter River Well	2.5 mi NW	Templeton	557	Overburden well
2	Sawyer Rd. Well	1.5 mi NW	Templeton	1,269	Overburden well

[4, 5, 6]

Table 2

Estimated Drinking Water Populations Served by
Groundwater Sources Within Four Miles of
Batchelor Oil Property

Radial Distance (Miles)	Approximate Population Served by Private Wells Within Radii	Approximate Population Served by Municipal Wells Within Radii
0.00 - 0.25	25	0
>0.25 - 0.50	86	0
>0.50 - 1.00	73	0
>1.00 - 2.00	389	1,269
>2.00 - 3.00	1,163	557
>3.00 - 4.00	908	0

[2, 3, 4, 5, 10, 11]

There are no residents on the site. The only individuals on-site are the three employees. The nearest resident is on the abutting lot to the east, which is greater than 200 feet from suspected source areas. No schools or day-care facilities are located within 200 feet of areas of suspected contamination. Table 3 presents the estimated population within four miles of the property as calculated into radial distance rings from the property.

Table 3

Estimated Population Within Four Miles of the Batchelor Oil Property

Radial Distance (Miles From-Site)	Approximate Population
0 - 0.25	43
>0.25 - 0.50	1,000
>0.50 - 1.00	3,892
>1.00 - 2.00	21,554
>2.00 - 3.00	2,584
>3.00 - 4.00	2,318

[2, 10, 11]

The Batchelor Oil property is approximately 500 feet west of the Otter River, and approximately 100 feet north of the clay pit pond. Although the Otter River is the most significant surface water body in proximity to the site, overland flow from the site does not likely impact it. This is due to a lack of storm drains along West Broadway, and a road grade elevation that is higher than the actual on-site elevation. There are no other observed preferred overland flow or surface water pathways to the Otter River from the site. The 15 mile surface water pathway starts where groundwater to surface water flow enters the Otter River. The Otter River merges with the Millers River approximately 10 miles downstream of the potential point of entry. There are approximately six miles of wetland frontage along the 15 mile surface water pathway [10, 11].

The clay pit pond is not listed as a commercial fishery, however it is used as a recreational fishery [8, 9]. Wetlands within four miles of the site are presented in Table 4.

No rare, endangered, or threatened animals, plants, or natural communities exist on the site [8, 9]. According to the U.S. Department of the Interior, transient Bald Eagles or Peregrine Falcons may be present in the area of the site.

Table 4
Wetlands Located Within Four Miles of
Batchelor Oil Facility

Wetlands Name/Association	Distance/Direction From Site (Miles)	Approximate Wetland Area (Acres)
Otter River Wetlands	0.25-4 N	1
Templeton Brook Wetlands	1-2 S	100
Baker Brook Wetlands	1.75 SE	100
Wilder Brook Wetlands	2 N	10
St. John's Cemetery Wetlands	1.5 NW	10
East Templeton Pond Wetlands	1-2 W	100
Partridgeville Rd. Wetlands	2 SW	60
Hubbardston Brook Wetlands	2.5 S	30
Mahoney Brook Wetlands	3-4 E	100

[10, 11]

SUMMARY

The Batchelor Oil property is located at 766 West Broadway, Gardner, Massachusetts. The property is approximately 1.5 acres, and currently the site of C&M Express, a trucking company. The former residential structure and attached garages are used for office space and vehicle maintenance. Floor drains with unknown outfalls in the maintenance garage have been identified as a potential sources of contamination.

The site is approximately 500 feet west of the Otter River, and approximately 100 feet north of a pond, which is a former clay pit. The 15 mile surface water pathway starts where groundwater to surface water flow enters the Otter River. The Otter River merges with the Millers River approximately 10 miles downstream of the potential point of entry. People within four miles of the site obtain drinking water from private, municipal and community supplies. There are no residents, schools, or day care facilities within 200 feet of an area of suspected contamination. There are three employees that work on-site at C&M Express, Inc.

The former clay-pit pond and Otter River are nearby recreational fisheries. No rare, endangered or threatened animals, plants or natural communities exist on the site.

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Superfund. However, these documents do not necessarily fulfill the requirements of other EPA regulations such as those under RCRA or other Federal, State or local regulations. The PA is a limited effort and is not intended to supersede more detailed investigations.

Submitted by

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